

The application of the Habitats Directive in Portugal

J.C. Costa¹, T. Monteiro-Henriques¹, C. Neto², P. Arsénio¹ & C. Aguiar³

¹*Instituto Superior de Agronomia, Technical University of Lisbon, Tapada da Ajuda 1300-017 Lisboa, Portugal; e-mail: jccosta@isa.utl.pt; tmh@isa.utl.pt; arseniop@isa.utl.pt*

²*Dept. Geography, University of Lisbon, Alameda da Universidade 1600-214, Lisboa, Portugal; e-mail: carlosneto@fl.ul.pt*

³*Escola Superior Agrária de Bragança, Campus de Santa Apolónia, Apartado 1172, 5301-855 Bragança, Portugal; e-mail: cfaguiar@ipb.pt*

Abstract

A succinct review of the application of the Habitats Directive in Portugal is presented. Since 1971 until 2000 Portugal has defined approximately 8,8% of its territory as national protected areas. With the application of the Habitats Directive nature conservation policies extended to more than 17,4 % of the territory increasing by 98% and the knowledge on vegetation community's habitats was certainly deepened. Including special protection areas (Birds Directive) the Portuguese territory under one or more conservation status totals 21,5%. Finally, the support given by the Portuguese Phytosociology Association – ALFA in the detailed description of the Directive habitats is divulged, showing the importance, usefulness and efficacy of phytosociologic studies.

Key words: Habitats Directive, nature conservation, Portugal.

Riassunto

Applicazione della Direttiva Habitat in Portogallo. Viene presentata una succinta revisione dell'applicazione della Direttiva Habitat in Portogallo. Tra il 1971 e il 2000 il Portogallo ha definito come aree nazionali protette circa l'8,8% del suo territorio. L'applicazione della Direttiva Habitat ha significato un aumento del 98% delle aree sottoposte a protezione legale, raggiungendo il 17,4% circa del territorio e un approfondimento della conoscenza degli habitat delle comunità vegetali. Includendo le zone speciale di protezione (Direttiva Uccelli) si totalizza il 21,5%. Nelle conclusioni si evidenzia il ruolo della Associazione Portoghese di Fitosociologia (ALFA) nella descrizione dettagliata degli habitat della Direttiva, dimostrando l'importanza, l'utilità e l'efficacia degli studi fitosociologici.

Parole chiave: Direttiva Habitat, conservazione della natura, Portogallo.

Introduction

Portugal first protected area “Parque Nacional da Peneda-Gerês” was created in 1971. Since then, Portugal (Azores and Madeira included) has defined 59 protected areas (1 National Park, 14 Natural Parks, 24 Natural Reserves, 10 Protected Landscapes and 10 Natural Monuments) covering approximately 8,8% of the Portuguese terrestrial territory. Considering most prominent international conventions Portugal has sheltered 17 areas within Ramsar Convention from 1980 to 2005, comprising ca. 1% of the Portuguese territory; 1 area as Biosphere Reserve MAB – UNESCO, “Paúl do Boquilobo” since 1981 and 1 area as World Natural Heritage – UNESCO, “Laurissilva da Madeira” since 1999. Nevertheless, only in 1998 was published the first book describing the most significant habitats of mainland Portugal (see Alves *et al.*, 1998).

The Corine Biotopes project and Natura 2000

During the inventory of the Corine Biotopes project,

which started in 1985, (Devillers *et al.*, 1991; Devillers & Devillers-Terschuren, 1993), 120 areas of interest where mapped in mainland Portugal during 1998. This project contributed decisively for a better understanding of the Portuguese natural heritage, although some areas still needed further studies. Some areas where re-studied mainly during the habitat mapping efforts in order to produce the national site list for Natura 2000 project (see Fig. 1 for an example).

In 1995 Portuguese botanists, biologists and phytosociologists started to propose areas with interest for conservation by mapping and characterizing the conservation state of the Habitats (Bern Convention and Habitats Directive) (Calado *et al.*, 2000; Costa *et al.*, 2000; Espírito Santo, 2000; Neto *et al.*, 2001; Pinto Cruz & Espírito Santo, 2000; Vasconcelos *et al.*, 2000). The Portuguese government decided the national site list based on the technical reports, proposing for Natura 2000 a total of 94 sites of Community importance (SCI), corresponding to 16.013 km², 17,4 % of the terrestrial Portuguese territory (see Fig. 2 for mainland Portugal map).

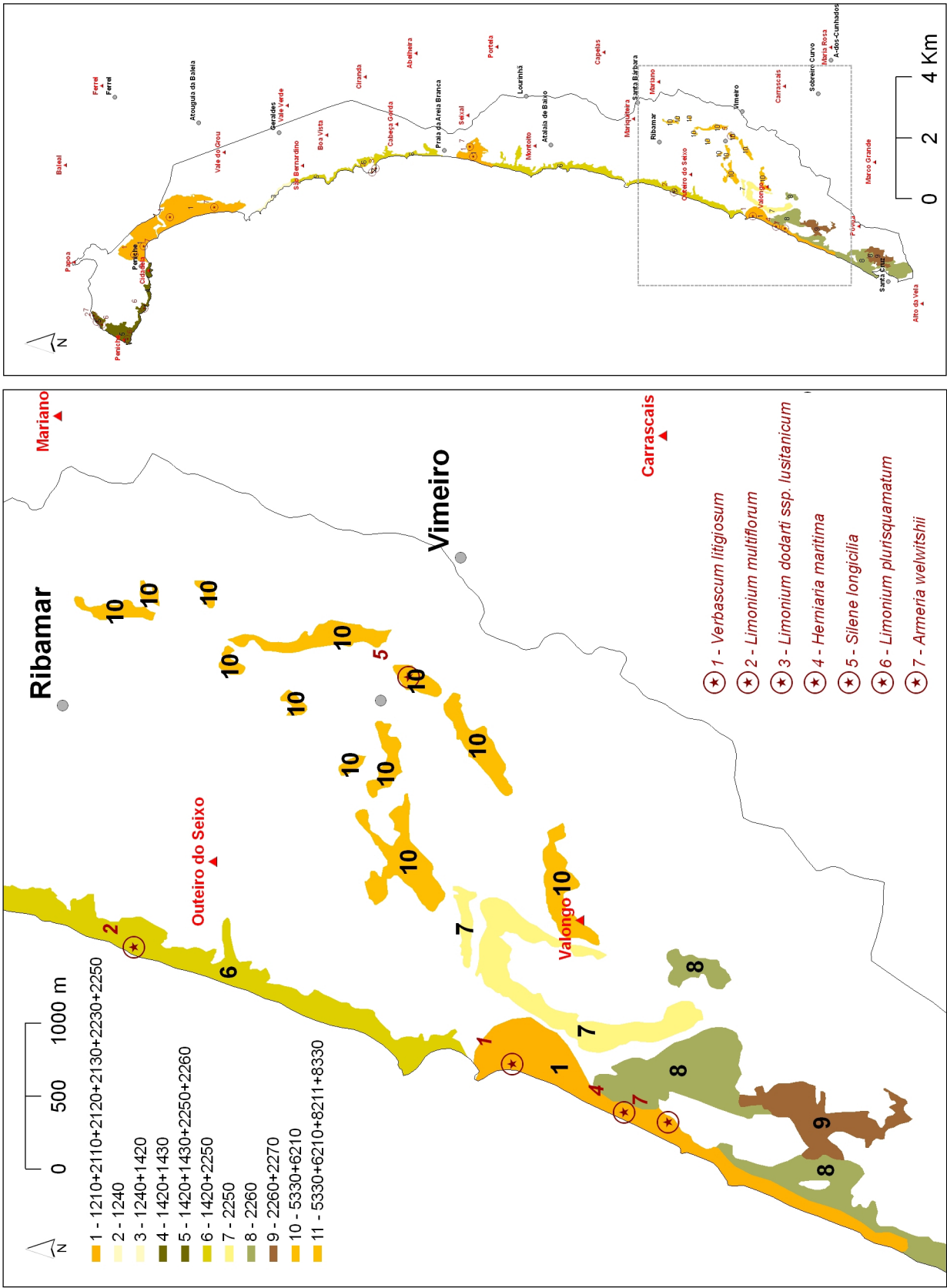


Fig. 1 – Example of a habitat and species map, from a technical report for Natura 2000 (Costa, 1997)

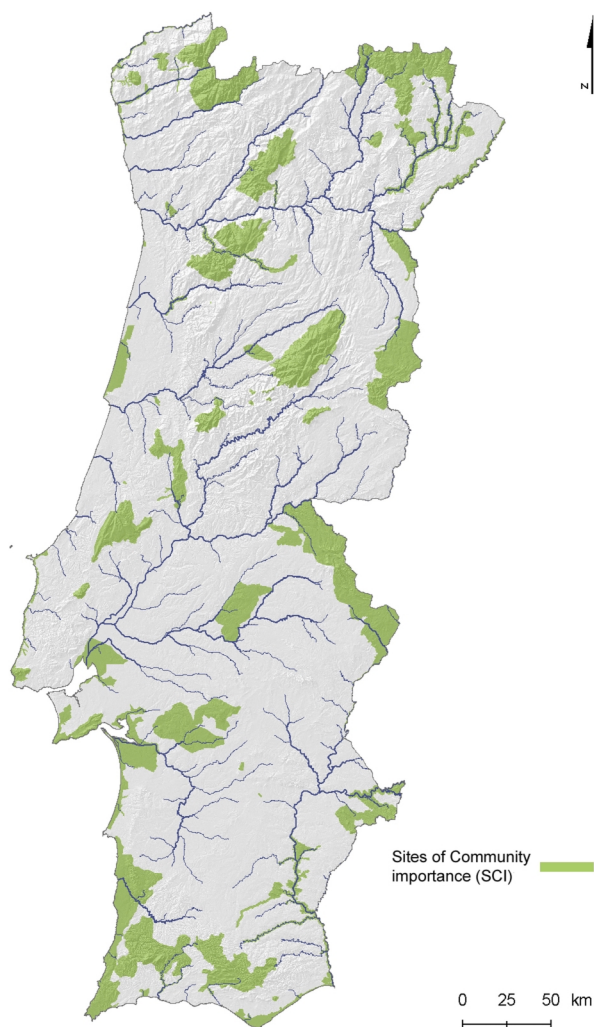


Fig. 2 – The 60 sites of Community importance (SCI) for mainland Portugal

Natura 2000 – present state

The Portuguese territory is included in three biogeographical regions (Atlantic, Mediterranean and Macaronesian) being relatively rich in habitats. Some distinct 88 habitats occur in mainland Portugal, 26 in Azores and 11 in Madeira archipelago (Alves *et al.*, 1998; Associação Lusitana de Fitossociologia, 2006). Considering mainland Portugal, 18 are priority habitats and 1 is exclusive (*5140 – *Cistus palhinhae* formations on maritime wet heaths).

During 1999 special protection areas (SPA, Birds Directive) of Portugal became part of Natura 2000: 50 sites corresponding to 10,1% of the terrestrial area of the territory. In 2002 SCIs list of Macaronesian

biogeographical region (34 sites from Azores and Madeira) was adopted within Natura 2000 (Commission of the European Communities, 2002). The same happened in 2004 for the 7 SCIs existing in NW mainland Portugal belonging to the Atlantic biogeographical region (Commission of the European Communities, 2004). Regarding the Mediterranean biogeographical region, 53 SCIs have been provisionally adopted within Natura 2000 in Mainland Portugal (Commission of the European Communities 2006). The sum of protected areas, SPAs and SCIs (terrestrial areas) correspond to about 21,5% of Portugal. In addition, other sites are being studied and its inclusion will be proposed.

Natura 2000 – Sectorial Plan

The first attempt to transpose the Habitats Directive in 1999, determined the necessity of a Sectorial Plan for Natura 2000. A Ministry Council Resolution in 2001 determined the terms of that plan. During 2005 ALFA elaborated detailed descriptive sheets for each of the 88 Directive habitats existing in mainland Portugal (see Fig. 3 for an example). 116 subtypes have been proposed and fully described. These files were commissioned by the national Nature Conservation Institute (ICN) and now integrate the Sectorial Plan of Natura 2000, in order to aid the habitat recognition, characterization and management. Each file included: EUNIS 2002, Palearctic 2001 and Corine Land Cover correspondence; EUR15, SCI and Portuguese distribution; Portuguese designation proposal; Diagnostic statement; Phytosociologic correspondence; Subtypes and its full description; Characterization; Abundance variation in the last millennium; Bioindicator species; Provided services; Conservation (state, threatens, objectives, management guidelines); Bibliography.

During 2006 those descriptive sheets, became available in the internet (www.icn.pt) contributing for the NATURA 2000 Sectorial Plan public discussion.

Natura 2000 – some public and private measures

The Institute for Nature Conservation laid out specific measures aiming to promote the conservation of natural habitats and of wild fauna and flora within the Portuguese territory: an example, among other initiatives, is the subvention granted to farmers, in order to maintain traditional cereal crops, on which depend

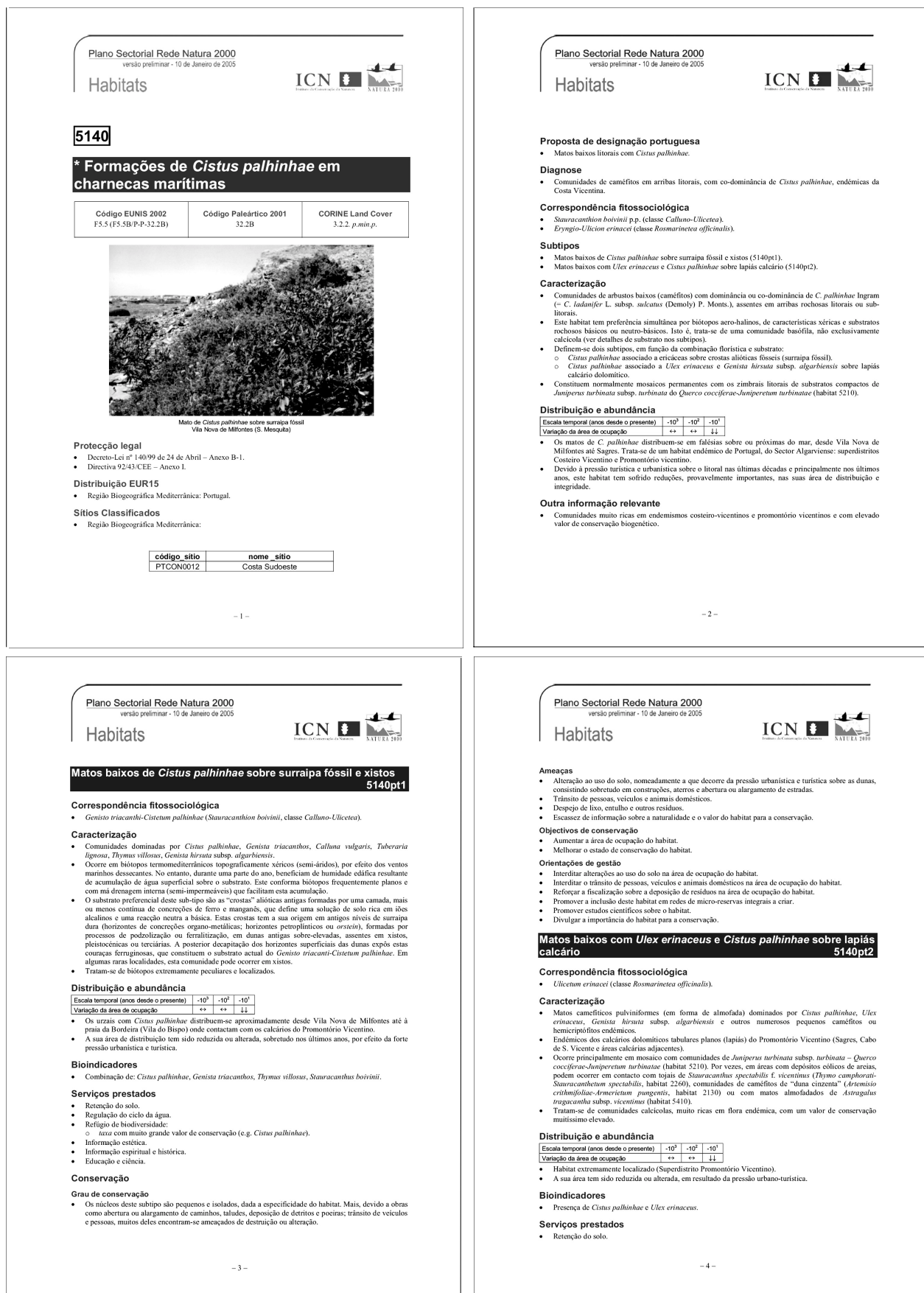
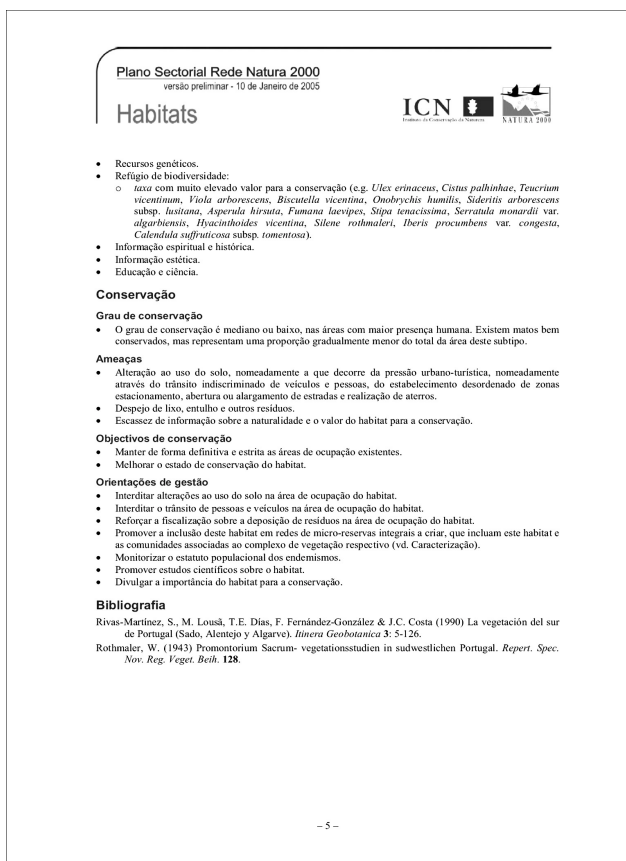


Fig. 3 – Example of a Habitat descriptive sheet (*5140)



the vulnerable species *Linaria ricardoi*.

Several LIFE projects have been directed to flora and habitat protection within protected areas: Cartografia de Habitats Naturais da Directiva 92/43/CEE (concluded); Livro Vermelho da Flora (partially concluded); Cartografia da Vegetação Natural e Semi-Natural do Território Continental Português (partially concluded); Palustris - Paúis do Baixo Mondego – Arzila; Habitats dulçaquícolas do Planalto Central da Serra da Estrela; Plano Nacional de Conservação da Flora em Perigo; Controle de vegetação exótica no PNPG – Vale do rio Homem; Recuperação de habitats salgados – salinas – da RNET; Recuperação de habitats salgados – salinas – da RNES; Recuperação de habitats do lince-ibérico na RNS Malcata.

All habitats and species are legally protected by the retransposed Habitats Directive: Decree-Law n.º 49/2005 (Habitats Directive Transposition, 2005), although, at the moment, the management responsibility of Natura 2000 sites outside protected areas is not yet clearly decided; in-between QUERCUS (a national NGO) initiated the creation of a micro-reserves network, buying or renting small areas of high interest for nature conservation, with the formal scientific support of ALFA. This sort of actions might be of extreme

importance for the effective protection of threatened plants and could incorporate a pan-European network of small protected areas as proposed by Laguna Lumbreras (2001).

Discussion

The application of the Habitats Directive in Portugal contributed for a more systematic approach on nature conservation within the Portuguese territory. It also promoted a deeper knowledge and understanding on existing vegetation community's habitats, leading to an increase of 98% of the total safeguarded area.

Phytosociology has been a decisive tool for habitat description, identification, understanding and management, proving the importance and usefulness of vegetation description and the efficacy of the universal classification it produces.

The main issues affecting habitats in Portugal are: littoral urban expansion, changes in grazing systems, invader plants, drainage of wetlands and dam construction. The first two issues will have brief discussion next.

Approximately 35% of the habitats types existing in continental Portugal are found on littoral areas (dunes, saltmarshes, sea cliffs etc.), where also most of the priority habitats are situated. Lundin & Linden (1993) estimate about 66% of world population lives within 60 km from the coastline. The same occurs in mainland Portugal where 47% of the population lives in the 62 municipalities that have maritime or estuarine shore, representing only 20 % of the territory. At the same time 60% of the littoral is included in Natura 2000 SCIs and SPAs, consequently, coastal zones reunite both biodiversity and human activities endangering the persistence of this natural heritage.

Abandonment of agriculture and the end of transhumance contribute for the diminishing of sheep and goat grazing pressure in mountain areas, leading to habitat loss of mountain grasslands and meadows. The traditional grazing with sheep and pigs on “montado” is being replaced by cattle grazing, endangering this semi-natural habitat.

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